



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,933	06/04/2001	Robert M. Lund	09775810-0035	3347
28863	7590	08/12/2008		
SHUMAKER & SIEFFERT, P. A.			EXAMINER	
1625 RADIO DRIVE			TAYLOR, BARRY W	
SUITE 300				
WOODBURY, MN 55125			ART UNIT	PAPER NUMBER
			2617	
			NOTIFICATION DATE	DELIVERY MODE
			08/12/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pairdocketing@ssiplaw.com

Office Action Summary	Application No. 09/873,933	Applicant(s) LUND ET AL.
	Examiner Barry W. Taylor	Art Unit 2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

1) Responsive to communication(s) filed on 18 April 2008.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3,37,39-41,43,44 and 47-69 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-3,37,39-41,43,44 and 47-69 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 04 June 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/GS/08)
 Paper No(s)/Mail Date _____ 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 63 and 67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 63 recites "a remote device" in line 9. The instant specification as originally filed does not describe the limitation in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time of the application was filed, had possession of the claimed invention.

2. Claims 68-69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 68 recites: Claim 68 (New): A point to multipoint network comprising: **a remote device**; a first line connected to the remote device; **a passive splitter** connected to the first line opposite the remote device; a plurality of additional lines

connected to the **passive splitter** opposite to the first line; and a plurality of subscriber units, each of the subscriber units connected to one of the additional lines opposite to the **passive splitter**, wherein each one of the subscriber units sends a subscriber unit identifier associated with the one of the subscriber units and a location code associated with a subscriber using the one of the subscriber units to the remote device via one of the set of additional lines, **the passive splitter** and the first line, wherein the location code permits identification of a geographic location of the subscriber, using the one of the subscriber units, wherein the remote device receives the subscriber unit identifiers and the location codes received from the subscriber units, and correlates the one of the subscriber units with the geographic location of the subscriber using the subscriber unit identifier and the location code received from the respective one of the subscriber units. The instant specification as originally filed does not describe the limitation "a remote device" and "a passive splitter" in such a way as to reasonable convey to one skilled in the relevant art that the inventor(s), at the time of the application was filed, had possession of the claimed invention.

3. Regarding new claims 68 and 69. It is unclear to the Examiner as to what Applicants are attempting to claim. It appears that claims 68 and 69 are directed towards a **passive optical network** having classification of Class 398 OPTICAL COMMUNICATIONS, subclass 25 Determination of communication parameter or classification of Class 398 OPTICAL COMMUNICATIONS, subclass 168 "PASSIVE SYSTEM". Applicants have already filed a divisional application 11/065,323 to deal with such claim limitations. For example, claim 43 as currently amended (see paper dated

5/7/08 of copending application 11/065,323) corresponds directly to new claim 68 of the present application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1- 2, 37, 39-41, 43-44 and 47-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulcahy et al (6,002,746 hereinafter Mulcahy) in view Dolin, Jr. et al (5,420,572 hereinafter Dolin).

Regarding claims 1, 49, 56 and 63. Mulcahy teaches a subscriber unit and method for correlating a subscriber unit to a physical port in a point-to-point or to a point-to-multipoint network (title, abstract) comprising:

prompting an installer to manually input a location code associated with the subscriber unit (col. 7 lines 64-67);

receiving the location code in the subscriber unit (col. 7 lines 64-67);

transmitting the location code via the network to a central repository (col. 7 lines 29-32); and

storing the location code in the central repository to associate the location code with the physical port (col. 8 lines 7-9).

According to Applicants, Mulcahy fails to teach transmitting the location code and a subscriber unit identifier to a central repository (see Amendment and remarks, paper dated 11/01/05 and comments appearing at the bottom of page 10, paper dated 11/7/06).

Dolin teaches a configuration device for use in a networked communication system (title, abstract) that allows any individual to configure a network by correctly and accurately assigning and recording addresses for each node (col. 3 line 63 - col. 4 line 8, co. 5 line 55 – col. 6 line 4). Dolin discloses that the preferred embodiment of the present invention is designed to interface with any number of physical media, including optical (col. 9 lines 12-52). Dolin teaches using Domain addresses to define a network (col. 10 lines 14-19, col. 10 line 62 - col. 11 line 6). Dolin teaches using location codes in conjunction with node addresses and node ids (col. 10 line 62 - col. 12 line 43) to provide for accurate and relatively simple configuration of a network.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Dolin into the teachings of Mulcahy in order to allow an installer of a network to store location information in conjunction with node addresses when network set-up is being conducted.

Regarding claim 2. Mulcahy teaches checking the location code for errors before storing (col. 8 lines 1 1-13); upon finding an error, transmitting an instruction to the subscriber unit to indicate error to the installer (col. 8 lines 14-22), and upon finding no errors, storing the location code (col. 7 lines 29-32). Applicants amend dependent

claim 2 to further include "correlating the subscriber unit with the geographic location using the location code and the subscriber unit identifier. The Examiner notes that Applicants original field specification is generally directed towards transmitting location code to central repository towards associating the location code with a physical port in a point-to-multipoint network. In other words, Applicants invention is directed towards storing location code in a central repository towards associating the location code with the physical port. Applicants originally specification (see U.S. Pub. No.: 2002/0184644, paragraph 0020) reveals the location code is just an integer, which reflects a customer number already used by the service provider (e.g. the methods that directly support the daily operation of a LEC) identifying the subscriber. Therefore, the CLI used in Mulcahy reflects a customer number already used by the service provider to identify the subscriber.

Regarding claim 37. Dolin teaches the location code permits identification of network service parameters associated with the subscriber unit (col. 11 lines 34-53).

Regarding claims 39, 50 and 57. Mulcahy teaches receiving the location code in the subscriber unit (col. 7 lines 64-67).

Regarding claims 40, 51 and 58. Mulcahy teaches prompting an installer to manually input a location code associated with the subscriber unit (col. 7 lines 64-67).

Regarding claims 41, 52 and 59. Mulcahy teaches test set used by craftsman (see 18 figure 4).

Regarding claims 43, 53-54 and 60-61. Dolin teaches subscriber unit is equipped to receive information including voice, data and video content (see col. 9 lines

12-52 wherein any number of physical media may be interfaced which include twisted pair and optical obviously providing voice and data to subscribers).

Regarding claims 44 and 55. Mulcahy teaches checking the location code for errors before storing (col. 8 lines 11-13); and upon detection of error in the location code, transmitting an instruction to the subscriber unit to indicate error to the installer (col. 8 lines 14-22).

Regarding claim 47. Dolin teaches wherein the subscriber unit identifier includes a serial number (see col. 9 lines 18-28 wherein each node are assigned a unique number at time of manufacturing which reads on serial number).

Regarding claim 48. Dolin teaches node addresses and node ids stored in conjunction with location codes (col. 11 line 1 - col. 12 line 43)

Regarding claim 62. Mulcahy teaches subscriber unit is located at subscriber location (see col. 8 lines 7-9 wherein CLI is typically used to physically identify subscriber units).

Regarding claim 64. Dolin teaches activating subscriber services provisioned for the subscriber after the correlation of the subscriber unit with the geographic location (see col. 10 line 62 – col. 12 line 43 wherein node addresses and ids are first associated with location code information so that future configuration and re-configuration may be easily conducted).

Regarding claim 65. Mulcahy teaches correlating the subscriber unit with the geographic location using the location code (col. 7 lines 64-67) and the subscriber unit identifier (col. 8 lines 7-9). The Examiner notes that Applicants original field

specification is generally directed towards transmitting location code to central repository towards associating the location code with a physical port in a point-to-multipoint network. In other words, Applicants invention is directed towards storing location code in a central repository towards associating the location code with the physical port. Applicants originally specification (see U.S. Pub. No.: 2002/0184644, paragraph 0020) reveals the location code is just an integer, which reflects a customer number already used by the service provider (e.g. the methods that directly support the daily operation of a LEC) identifying the subscriber. Therefore, the CLI used in Mulcahy reflects a customer number already used by the service provider to identify the subscriber.

Regarding claim 66. Dolin teaches activating subscriber services provisioned for the subscriber after correlation of the subscriber unit with the geographic location (see col. 9 lines 12-27 wherein the present invention is designed to interface with any number of physical media, including optical and provides a unique means for installation and maintenance of the network --- col. 9 lines 42-52).

Regarding claim 67. Dolin teaches activating subscriber services provisioned for the subscriber after correlation of the subscriber unit with the geographic location (see col. 9 lines 12-27 wherein the present invention is designed to interface with any number of physical media, including optical and provides a unique means for installation and maintenance of the network --- col. 9 lines 42-52). The Examiner notes that Applicants original field specification is generally directed towards transmitting location code to central repository towards associating the location code with a physical port in a

point-to-multipoint network. In other words, Applicants invention is directed towards storing location code in a central repository towards associating the location code with the physical port. Applicants originally specification (see U.S. Pub. No.: 2002/0184644, paragraph 0020) reveals the location code is just an integer, which reflects a customer number already used by the service provider (e.g. the methods that directly support the daily operation of a LEC) identifying the subscriber. Therefore, the CLI used in Mulcahy reflects a customer number already used by the service provider to identify the subscriber.

Regarding claim 68. Mulcahy teaches a point-to-point or a point-to-multipoint network (title, abstract) comprising:

wherein subscriber units send a location code (col. 7 lines 64-67) and subscriber unit identifier (see CLI --- col. 8 lines 7-10, col. 8 lines 49-50) associated with the subscriber unit to a remote device (col. 8 lines 7-9, col. 7 lines 29-32) ;

wherein the location code permits identification of a geographic location of the subscriber (see col. 7 lines 64-67 wherein location code "terminal number" permits the identification where the terminal is located); wherein the central repository (i.e. remote device) receives the subscriber unit identifiers (see CLI --- col. 8 lines 7-10, col. 8 lines 49-50) and the location codes (col. 7 lines 64-67) and correlates subscriber units (col. 8 lines 7-9, col. 7 lines 29-32) with the geographic location using the subscriber unit identifier (see CLI --- col. 8 lines 7-10, col. 8 lines 49-50) and the location code (col. 7 lines 64-67).

Mulcahy does not appear to teach: a remote device; a first line connected to the remote device; a passive splitter connected to the first line opposite the remote device; a plurality of additional lines connected to the passive splitter opposite to the first line; and a plurality of subscriber units, each of the subscriber units connected to one of the additional lines opposite to the passive splitter.

Dolin teaches a configuration device for use in a networked communication system (title, abstract) that allows any individual to configure a network by correctly and accurately assigning and recording addresses for each node (col. 3 line 63 - col. 4 line 8, co. 5 line 55 – col. 6 line 4). Dolin discloses that the preferred embodiment of the present invention is designed to interface with any number of physical media, including optical (col. 9 lines 12-52). Dolin teaches using Domain addresses to define a network (col. 10 lines 14-19, col. 10 line 62 - col. 11 line 6). Dolin teaches using location codes in conjunction with node addresses and node ids (col. 10 line 62 - col. 12 line 43) to provide for accurate and relatively simple configuration of a network. The Examiner notes that Dolin (col. 9 lines 12-17) reveals the network of the present invention may interface with various media such as power lines, twisted pair, radio frequency, infrared, ultrasonic, **optical**, coaxial, or other media to form a network which would obviously require a remote unit, passive splitter when interfacing with **optical media**.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Dolin into the teachings of Mulcahy in order to provide a more flexible system that could be applied to a variety of networks, including optical as disclosed by Dolin.

Regarding claim 69. Dolin teaches activating subscriber services provisioned for the subscriber after correlation of the subscriber unit with the geographic location (see col. 9 lines 12-27 wherein the present invention is designed to interface with any number of physical media, including optical and provides a unique means for installation and maintenance of the network --- col. 9 lines 42-52). The Examiner notes that Applicants original field specification is generally directed towards transmitting location code to central repository towards associating the location code with a physical port in a point-to-multipoint network. In other words, Applicants invention is directed towards storing location code in a central repository towards associating the location code with the physical port. Applicants originally specification (see U.S. Pub. No.: 2002/0184644, paragraph 0020) reveals the location code is just an integer, which reflects a customer number already used by the service provider (e.g. the methods that directly support the daily operation of a LEC) identifying the subscriber. Therefore, the CLI used in Mulcahy reflects a customer number already used by the service provider to identify the subscriber.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mulcahy et al (6,002,746 hereinafter Mulcahy) in view of Dolin, Jr. et al (5,420,572 hereinafter Dolin) further in view of Kennedy et al (6,163,594 hereinafter Kennedy).

Regarding claim 3. Mulcahy in view of Dolin fail to show prompting the installer to reinput the location code. However, Mulcahy discloses that if an error is detected, the operator can instruct a field engineer (i.e. installer) to perform appropriate operations to correct the error (col. 8 lines 19-22).

Kennedy allows the craftsman to re-input the location code (col. 2 lines 51-60, col. 3 lines 33-66, col. 7 lines 39-41, col. 10 lines 1-3, lines 29-31, see "reentering the correct directory number" in column 11).

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Kennedy into the teachings of Mulcahy and Dolin to allow the technician the opportunity to perform appropriate operations to correct the error.

Response to Arguments

6. Applicant's arguments filed 4/18/08 have been fully considered but they are not persuasive.

a) Applicants express frustration with the current rejection since the same rejection was previously applied in an office action dated January 11, 2006 (see remarks on page 9, paper dated 4/18/08).

The Examiner reminds Applicants, during a personal interview July 10, 2007, Applicants demanded that the Examiners Supervisor be present for the interview. The Examiners supervisor Duc Nguyen agreed and was present for the interview. During the interview the Examiners Supervisor was not sure how Applicants invention worked. Therefore, Duc Nguyen asked the inventor, who was also present, as to how the invention worked since the specification and claim language was extremely vague. Duc Nguyen explained that he just had his Internet service installed wherein MAC ID and subscriber location was sent back to a central server, then Duc Nguyen asked the inventor how the invention worked. The inventor replied that the invention also used

MAC ID and subscriber location wherein the MAC ID and subscriber location was sent back to a central server. After the interview, the Examiners supervisor (i.e. Duc Nguyen) directed the Examiner to re-apply the Dolin reference since Dolin correlates node id (i.e. subscriber unit identifier) with location code.

b) Next, Applicants argue that Mulcahy does not teach transmitting both a location code and a subscriber unit identifier to a central repository (see page 10, paper dated 4/18/08).

The Examiner notes that Applicants do not argue or define what "location code" or "subscriber unit identifier" mean? Mulcahy teaches location code (i.e. terminal number) and also suggest subscriber id transmitted back to database (see CLI in column 8 lines 7-9 and column 8 lines 49-50). Therefore, since Applicants do not define subscriber id nor eliminate the use of CLI the Examiner applied Dolin to teach correlating node id (i.e. subscriber unit identifier) with location code (i.e. geographic location).

c) Applicants generally argue that Mulcahy invention is directed towards a point-to-point system (see top of page 11, paper dated 4/18/08).

The Examiner notes that Dolin invention can be interfaced to **various media** (col. 9 lines 12-17) and also recognizes that **prior to network set-up, a node has no address assigned** (col. 11 lines 4-6).

d) Applicants argue that Mulcahy teaches using terminal number but is silent with respect to providing an indication of a geographic location (see page 11, paper dated 4/18/08).

The Examiner notes that Mulcahy teaches location (i.e. terminal number) and also suggest transmitting subscriber id back to database (see CLI in column 8 lines 7-9 and column 8 lines 49-50). Therefore, Mulcahy teaches Calling Line Identity which reads on the subscriber's geographic location.

e) Applicants continue to argue that Mulcahy invention is directed towards a point-to-point network and Applicants invention is directed towards a point-to-multipoint network (see pages 12-14, paper dated 4/18/08).

Mulcahy does not rule out the possibility of sending geographic location information to a database (see CLI in column 8 lines 7-9 and column 8 lines 49-50). Dolin teaches a configuration device for use in a networked communication system (title, abstract) that allows any individual to configure a network by correctly and accurately assigning and recording addresses for each node (col. 3 line 63 - col. 4 line 8, co. 5 line 55 – col. 6 line 4). Dolin discloses that the preferred embodiment of the present invention is designed to interface with **any number of physical media, including optical** (col. 9 lines 12-52). Dolin teaches using Domain addresses to define a network (col. 10 lines 14-19, col. 10 line 62 - col. 11 line 6). Dolin teaches using location codes in conjunction with node addresses and node ids (col. 10 line 62 - col. 12 line 43) to provide for accurate and relatively simple configuration of a network.

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Dolin into the teachings of Mulcahy in order to allow an installer of a network to store location information in conjunction with node addresses when network **set-up** is being conducted.

f) Next, Applicants argue that one of ordinary skill in the art would not be motivated to combine Dolin with Mulcahy (see pages 15-16, paper dated 4/18/08).

The Examiner disagrees. Applicants have argued that Mulcahy teaches a point-to-point network. Dolin clearly discloses that the preferred embodiment is designed to **interface with any number of physical media, including optical (col. 9 lines 12-52)**. Therefore, modifying the invention as taught by Mulcahy would only provide for a more flexible system that could be **applied to a variety of networks**, including optical in an accurate and relatively simple manner.

g) Applicants argue that prompting an installer to reinput a location code is novel (page 17, paper dated 4/18/08).

The Examiner disagrees. The combination of Mulcahy and Dolin provides for a more flexible system that can be interfaced to not only a point-to-point network but also to an optical network (i.e. point-to-multipoint) and prompting an installer to reinput a location code upon finding an error is not novel as evident by Kennedy.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2617

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached at (571) 272-7023. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number (**571-273-8300**).

/Barry W Taylor/
Primary Examiner, Art Unit 2617